REMARKS

Reconsideration and allowance are requested.

Claims 1 and 15 reformatted to remove the European style characterizing language. Claims 15-25 an 27 are also broadened by removing means-plus-function language.

The Examiner rejects claims 1-3, 5-11, 13, 14, 16, 17, 19, 20, 22, 26, 27, and 28 are rejected for obviousness based on Dick et al (referred to by the Examiner as Stephen which is the inventor's first name) (US-20040114593) in view of Vayanos to (US-20050022098). This rejection is respectfully traversed.

The Examiner relies on paragraph [0038] and Figure 5 in US-20040114593 arguing that it teaches analyzing at the medium access control (MAC) layer some or all of a header of a radio link control (RLC) data unit associated with the one data flow (MAC PDU is first received at step 401 of Figure 5). The header of the MAC PDU is read for determining the priority of the MAC PDU, and an appropriate reordering buffer is chosen (see step 405 in Figure 5). Based on the analysis, a priority of the data unit relative to other data units associated with the one data flow is determined. The Examiner suggests that step 405 in Figure 5 also discloses the header of the MAC PDU is read for determining the priority of the MAC PDU and an appropriate reordering buffer is chosen. The Examiner is misreading what is recited in independent claims 1 and 15.

The independent claims 1 and 15 in this case recite that the MAC layer examines some or all of the header of an **RLC** PDU. For example, claim 1 recites: "receiving at a medium access control layer <u>data units from a higher radio link control layer</u>; analyzing at the medium access control layer some or all of a <u>header of a radio link control data unit</u> associated with the one data flow; based on the analysis, determining at the medium access control layer a priority of the data

1445975

unit relative to other data units associated with the one data flow." In Dick et al, the MAC layer examines only MAC PDU headers. Specifically, the header read in steps 401 and 405 in Dick et al is the MAC PDU header—not some or all of the header of an RLC PDU.

Moreover, the flow in Figure 5 of Dick et al is in the other direction from what is claimed. In Figure 5, the steps are being performed at the receiver side, and the MAC PDU is processed up the protocol layer stack. But in claims 1 and 15, the data units are being passed down the protocol layer stack at the transmitter side for transmission over the radio interface. Similar deficiencies exist for claim 15.

Other features from claims 1 and 15 are missing from Dick et al as the Examiner admits, e.g., scheduling at the MAC layer transmission of higher priority data units associated with the one data flow before lower priority data units associated with the one data flow. For that feature, the Examiner relies on Vayanos pointing to paragraph [0061]. Nevertheless, Vayanos does not overcome the deficiencies already noted with respect to Dick et al. In Vayanos, the MAC entity acts on MAC header information and not on RLC header information. So combining Dick and Vayanos fails to teach the features quoted above. Nor does the proposed combination make sense since the receiver in Dick's Figure 5 does not need a data unit transmission scheduler.

For the features of claims 2, 16, 3, and 17, the Examiner points to Dick's paragraph [0038]. But all that Dick teaches here is that the MAC PDU header is read to determine the priority of the MAC PDU. The inference is that the MAC PDU header explicitly indicates the priority of the MAC PDU. Nor does this text in [0038] explicitly teach determining the priority of the MAC PDU based on whether the data unit is a control type or data type. The Examiner does not cite any evidence to support the Examiner's contention. A similar lack of evidence undermines the rejection of dependent claims 5-8, 18-20, and 22.

1445975

Regarding dependent claims 4, 12, 18, and 25, the Examiner admits that Dick and Vayanos do not teach prioritizing retransmission of a previously-transmitted data unit associated with the one data flow over an original transmission of a data unit associated with the one data flow but points to [0025] of a third reference to Yi (20060062323) as teaching that feature.

Yi teaches that retransmissions of RLC PDUs are prioritized over first transmissions of RLC PDUs in the RLC layer. That is straightforward to accomplish in the RLC layer where protocol states include information about which PDUs are retransmissions and which are first transmissions. But the problem solved by the inventors in this case is that a mix of first transmissions and retransmissions of RLC PDUs are present in the radio base station buffer. Since no RLC protocol functionality or RLC state information is present in the radio base station, the teaching of Yi is not applicable.

The Examiner's contention regarding setting poll bits is unreasonable. As Yi describes, the RLC protocol layer includes separate buffers for PDUs transmitted for the first time and for retransmissions of PDUs. Yi teaches that retransmissions may have priority over first transmission and that it is possible to set the poll bit in a retransmitted PDU. But that does teach the features of claims 12 and 25 where if the poll bit happens to be set in one PDU, then the poll bit is automatically set in another, higher priority PDU.

The application is in condition for allowance. An early notice to that effect is solicited.

1445975

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1445975